Nandan B. Parikh

nandanbparikh@gmail.com | LinkedIn | GitHub

Education

Georgia Institute of Technology, MS in Computer Science August 2025 – May 2027
- **Coursework (Tentative)**: Computer Vision, Data Vis. Principles, Human & ML, Data Science for Epidemiology

Birla Institute of Technology and Science, Pilani, BE in Computer Science August 2019 - May 2023
- Overall GPA: **8.8**/10, Major GPA: **9.48**/10
- **Thesis**: High Throughput Microscopy Image Deblurring
- **Coursework**: Deep Learning, Operating Systems, Applied Statistical Methods, Computer Networks

Experience

Software Development Engineer II (SDE-2), Flipkart– Bengaluru, India March 2025 – Aug 2025
- **Conceptualized** and led the **end-to-end** design and architecture of an **LLM-powered Open Search** system
- Mitigated common risks associated with LLMs by **benchmarking vector databases** and implementing **guardrails** to ensure **system reliability** and factual grounding

Software Development Engineer I (SDE-1), Flipkart– Bengaluru, India July 2023 – March 2025
- **Revamped** the Hotel's Division search system, improving user experience and **reducing the p95 latency by almost 50% (from 1.9s to 900ms)** through **efficient caching** and **query optimisation**
- Built a daily score ingestion pipeline for **600K+ hotels** and multiple ranking strategies using **BigQuery** and batch processing
- Developed a **contextual federator** to dynamically select and **A/B test** ranking strategies by user segment
- Engineered instrumentation throughout the user funnel to capture key metrics like **Click-Through Rate** (CTR) and booking numbers to **evaluate strategy performance**

Undergraduate Research Assistant, Boston College CV Lab – Boston, MA Nov 2022 – June 2023
- Created an **end-to-end microscopy image deblurring** pipeline including **blur detection and correction** to increase microscope throughput
- Implemented a novel **graph reasoning attention network** for better semantic representation of the regions
- Researched and implemented various **no-reference blur detection metrics** to select the best fit for the use case

Publications

- R. L. Schalek, **N. Parikh**, Y. Wu, J. W. Lichtman, and D. Wei, *Real-time Image Deblurring to Improve Throughput of Serial-Section Volume Electron Microscopy for Neural Connectomic Studies*, Microscopy and Microanalysis, vol. 29, no. Supplement_1, pp. 988–989, Aug. 2023. https://doi.org/10.1093/micmic/ozad067.494

Projects

SONAR to Satellite Image Translation GitHub
- Trained a **Pix2Pix-based model** for image translation, incorporating a **domain-specific image enhancement module** for improved performance.
- Implemented a **multiscale discriminator** and an edge-guided loss function to improve translation quality and preserve edge details
- Enhanced **FID** from **71.584** to **70.815** and **PSNR** from **31.76** to **32.85**

Technologies

Languages: Python, SQL, Java, MATLAB, C/C++

Technologies: ElasticSearch, Aerospike, Redis, Qdrant, MongoDB

Libraries: PyTorch, Numpy, Pandas, OpenCV, Scikit-learn, Matplotlib